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VAN DYKE, GARDNER, LINN AND BURKHART, LLP 2851 CHARLEVOIX DRIVE, S.E. P.O. BOX 888695 GRAND RAPIDS, MI 49588-8695			KYLE, MICHAEL J	
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Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-6, 8-12, 23, 25-28, 39, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood, Jr. et al ("Wood", U.S. Patent No. 5,611,114) in view of Lautenschlager et al ("Lautenschlager", U.S. Patent No. 5,557,827). With respect to claims 1, 8, and 9, Wood discloses an automobile hinge comprising a panel attachment plate (12), a body attachment plate (14) and an intermediate member (16) pivotably attached to the body attachment plate (via 24) and panel attachment plate (via 20). The intermediate member includes opposing sidewalls and a center flange (see figure 1). The sidewalls engage the body attachment plate, with the center flange being spaced from the body attachment plate, in a first position (see figure 1). The intermediate member is pivotably attached to the body attachment plate at a junction of the first and second portions, and has first and second portions (16a, 16b) arranged at an angle relative to each other. Opposite sidewalls at the junction pivotally attach to the body attachment plate. Additionally, Wood discloses the intermediate member (16) to comprise at least one panel stop member configured to engage a stop portion of the panel attachment plate to limit pivotal movement (column 4, lines 25-27, or 60d in figure 5). Examiner notes that the portion contacted by the panel stop member is considered to be the "stop portion". The panel stop member and stop portion are adapted to limit pivotal movement of the panel attachment

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plate at different positions (column 4, lines 23-25, “selection of the size of the stop member”). It is further noted that the claimed limitation of “stamped” is a process limitation in a product claim and is given little patentable weight. As long as the prior art is capable of being made from claimed process, then it is considered to read on the limitation. Wood fails to disclose the intermediate member to be U-shaped in cross section.

3. Lautenschlager teaches a hinge arrangement with a member (10'', see figure 3), where the member has a generally U-shaped cross section (formed by 12, 14) along substantially an entire length thereof. The member includes first (longer portion, containing 24a, 24' and 26) and second portions (portion angled relative to the first portion, right hand side of figure 3) each having sidewalls and a center flange. Lautenschlager teaches this element to be made stamped sheet metal rather than a casting process (column 1, lines 17-20). Lautenschlager continues to discuss that such arrangements are known to be stamped because of the reduction in wall thickness leads to a reduction of weight and greater strength when compared to die cast metals (column 1, lines 20-25). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the intermediate member of Wood as taught by Lautenschlager, such that it is made of a hollow U-shape with sidewalls and a center flange along its length, in order to reduce weight and increase strength when compared to cast metals.

4. Regarding claim 9, it is noted that the limitation of “being cut” is a product-by-process limitation in a product claim, and is given little patentable weight. As long as the prior art meets the structural limitations of the claim, and is *capable* of being made by the same process, then the prior art is considered to read on the claim. In the case, the stop (16c, or similar stop

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engaging the panel attachment plate) is capable of being cut during manufacturing of the hinge.

Further, Wood discloses the intermediate member ("support member") can be prepared by "machining" (column 2, lines 23-27). Examiner asserts that "machining" includes cutting.

5. With respect to claim 3, Wood discloses the intermediate member to comprise first and second portions (16a and 16b) at a relative angle to one another. The intermediate member (16) is pivotably attached to the body attachment plate (14) at a junction of the first and second portions (16a, 16b). The panel attachment plate (12) is pivotably attached to the intermediate member at an end of the second portion (16a).

6. With respect to claims 4 and 5, Wood discloses the intermediate member to include a panel stop member at an end that is configured to engage a portion of the panel attachment member (column 4, lines 19-27, specifically, lines 25-27, also see embodiment shown in figure 5, reference 60d). The intermediate member (16) also includes a body stop plate member (16c) that engages the body attachment plate to limit pivotal movement.

7. With respect to claim 6, Wood discloses the body plate stop member (16c) to comprise at least one flange (16c) protruding from the first portion (16a) of the intermediate member (16) and engaging a corresponding flange on the body attachment plate. The flange (16 c) protrudes outwardly from the first portion (16 a) of the intermediate portion, in a direction generally transverse to a longitudinal axis of the first portion. The body attachment plate comprises at least one generally raised flange (22a, 22b) extending along an edge portion of the body attachment plate and transverse to the edge portion to define a hinge portion (which receives pin 24).

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8. With respect to claim 10, Wood discloses a panel stop member (column 4, lines 23-27, or 60d). However, neither Wood nor Lautenschlager discloses there to be a pair of panel stop members. However, replacing a single piece with multiple parts is considered to be within the level of one having ordinary skill in the art, as no new or unexpected result is produced from such a modification. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Wood, so that there is a pair of panel stop members, as no new or unexpected result is produced from this modification.

9. With respect to claim 11, Wood discloses the stop members are adaptable to limit pivotable movement of the panel attachment plate at different positions (column 4, lines 23-27). Examiner notes that “being cut” is a product-by-process limitation, and has already been addressed in this Office Action.

10. With respect to claim 12, Wood discloses the center flange of the intermediate portion (16) to include a fastener portion (see figure 1, on 16b), and is securable to the body attachment plate with a fastener.

11. With respect to claim 23, Wood discloses a method of making an automobile hinge comprising the steps of providing a panel attachment plate (12), providing a body attachment plate (14) and providing an intermediate member (16) with first and second leg portions (16a, 16b) extending from a junction at an angle to one another. The intermediate member has first and second sidewalls and a center flange, and is pivotably attached to the panel attachment plate (12) and the body attachment plate (14) at the sidewalls of the junction. The panel attachment plate is attached to the sidewalls of the intermediate member at an end portion of the second leg

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portion (16a, at 20). The first leg portion (16b) is positioned generally along and at least partially engages the body attachment plate (14). Additionally, Wood discloses forming a stop portion of the intermediate member (column 4, lines 25-27). The stop limits the range of pivotal movement of the panel attachment plate with respect to the intermediate member. Further, the first leg portion (16b) is secured to the body attachment plate when the intermediate member is in the first position. Wood does not disclose the intermediate member to be made by stamping a metallic sheet, or having a U-shaped cross section.

12. Lautenschlager teaches a hinge arrangement with a member (10'', see figure 3), where the member has a generally U-shaped cross section (formed by 12, 14) along substantially an entire length thereof. The member includes first (longer portion, containing 24a, 24' and 26) and second portions (portion angled relative to the first portion, right hand side of figure 3) each having sidewalls and a center flange forming a U-shaped cross section. Lautenschlager teaches this element to be made stamped sheet metal rather than a casting process (column 1, lines 17-20). Lautenschlager continues to discuss that such arrangements are known to be stamped because of the reduction in wall thickness leads to a reduction of weight and greater strength when compared to die cast metals (column 1, lines 20-25). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the intermediate member of Wood as taught by Lautenschlager, such that it is made of a hollow U-shape with sidewalls and a center flange along its length, in order to reduce weight and increase strength when compared to cast metals.

13. It is noted that Wood discloses the intermediate member ("support member") is formed of a metal body and may be prepared by "machining" (column 2, lines 23-27). Wood also states,

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“By selection of the size of stop member 16c...the degree of restriction may be controlled”

(column 4, lines 23-25, Wood also says the feature 16c may be incorporated into the hinge with regard to the first plate, or panel attachment plate, 12), which shows the size of the stop may be adjusted depending on the application. Examiner also cites the embodiment shown in figure 5, specifically feature 60d, to show this “stop”. Examiner notes that “machining” includes processes such as milling, cutting, and shaping.

14. With respect to claim 25, the combination of Wood and Lautenschlager teaches forming the stop comprises adjusting a stamping tool to form a desired stop on the intermediate member. As noted in the preceding paragraph, Wood discloses a degree of adjustability in the manufacturing of the stop. Lautenschlager teaches a stamping process.

15. With respect to claim 26, Wood discloses the hinge is attached to a vehicle body and a vehicle gate.

16. With respect to claims 27 and 28, Wood discloses trimming the stop portion to include punching a greater portion from the intermediate member to create a greater range of motion, and punching a lesser portion from the intermediate member to create a lesser range of motion (column 4, lines 23-25). It is noted that Wood discloses the intermediate member (“support member”) is formed of a metal body and may be prepared by “machining” (column 2, lines 23-27). Examiner notes that “machining” includes processes such as milling, cutting, shaping, and punching.

17. With respect to claim 39, Wood and Lautenschlager discloses the stop (16c) and intermediate member (16) are stamped to have a selected one of two forms of the intermediate member to define the desired stopping position of the body attachment plate relative to the

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intermediate member (16) at a respective one of at least two orientations. Lautenschlager teaches the stamping process. Wood discloses that size of the stop member is selected to control a degree of restriction (column 4, lines 23-27).

18. With respect to claim 40, Wood discloses that the center flange of the first leg (16b) is secured to the attachment plate by a fastener (see threaded hole on 16b, figure 1).

Allowable Subject Matter

19. Claims 7 and 24 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

20. Claims 13-21, 29, and 32-38 allowed.

Response to Arguments

21. Applicant's arguments with respect to claims 1 and 23 have been considered but are moot in view of the new ground(s) of rejection. Examiner has incorporated the teachings of Lautenschlager into the rejections above. The new grounds of rejection were necessitated by applicant's amendment to claims, specifically that the U-shape is along substantially an entire length, and that each of the first and second portions include opposite sidewalls and center flange.

Conclusion

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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23. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Kyle whose telephone number is 571-272-7057. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

26. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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ROBERT J. SANDY
PRIMARY EXAMINER